



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------------|------------------|
| 10/732,832  | 12/09/2003  | Iraj Rafei           | 1519-3663                      | 6798             |
| 7590 11/19/2004   |             |                      |                                |                  |
| KEITH A. CUSHING<br>4201 S.W. VACUNA STREET<br>PORTLAND, OR 97219 |             |                      | EXAMINER<br>MCCALL, ERIC SCOTT |                  |
|   |             |                      | ART UNIT<br>2855               | PAPER NUMBER     |

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                    |  |
|------------------------------|--------------------------------------|------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/732,832 | <b>Applicant(s)</b><br>RAFEI, IRAJ |  |
|                              | <b>Examiner</b><br>Eric S. McCall    | <b>Art Unit</b><br>2855            |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **LUBRICATION SYSTEM MONITOR**

### **FIRST OFFICE ACTION**

#### **CLAIMS**

#### **NON-STATUTORY DOUBLE PATENTING**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 5,987,975. Although the conflicting claims are not identical, they are not patentably distinct from each other because the

present claims, which are claimed as “open-ended” claims, entail the same subject matter in a broader sense than the claims of the said patent.

With regards to claim 1, claim 1 of the 5,987,975 patent clearly sets forth a lubrication system monitor for an engine, said monitor comprising:

a first sensor adapted to monitor a first condition of said engine and provide a first signal representing said first condition;

a second sensor adapted to monitor a second condition of said engine and provide a second signal representing said second condition;

a monitor circuit receiving said first and second signals and producing an output substantially constant for said first and second signals, said substantially constant output corresponding to normal operation of said engine (col. 8, lines 53-67).

With regards to claim 2, claim 2 of the 5,987,975 patent clearly sets forth a system according to claim 1 wherein said first sensor is a pressure sensor and said first signal is a pressure signal taken from said pressure sensor modified according to at least a charge flow constant value and by a temperature-variant value (col. 9, lines 1-5).

With regards to claim 3, claim 3 of the 5,987,975 patent clearly sets forth a system according to claim 1 wherein said second sensor is a flow sensor and said second signal is a lubricant fluid flow value (col. 9, lines 6-8).

With regards to claim 4, claim 4 of the 5,987,975 patent clearly sets forth a system according to claim 1 wherein said system further comprises a third sensor operating as a temperature sensor and providing a temperature signal, said first sensor being a pressure sensor operating in conjunction with said temperature sensor to provide as said first signal a pressure signal modified as a function of said temperature signal (col. 9, lines 9-14).

With regards to claim 5, claim 5 of the 5,987,975 patent clearly sets forth a system according to claim 1 wherein said system further comprises a third sensor operating as a temperature sensor and providing a temperature signal, said first sensor being a pressure sensor providing a pressure signal and operating in conjunction with said temperature sensor to provide as said first signal a pressure signal modified as a function of said temperature signal (col. 9, lines 15-21).

Furthermore, claim 7 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent No. 5,987,975.

Claim 7 is directed to a method of monitoring a machine. Patented claim 6 is directed to a monitor for a machine. Patented claim 6 fails to teach a method of monitoring a machine.

However, it would have been obvious to one having ordinary skill in the art armed with said patent to arrive at the claimed method.

The motivation being that although the conflicting claims are not identical, they are not patentably distinct from each other because the patented claim, which is directed to a monitor, would include the operation steps as now claimed in order to operate the said monitor as can be seen in the patent's full disclosure.

As such, claim 6 of the 5,987,975 patent suggests a method of monitoring a machine including a lubrication system, the method comprising:

detecting pressure, temperature, and flow relative to said lubrication system (col. 10, lines 4-11);

calculating a value as a function of said detected pressure, temperature, and flow relative to said lubrication system, said value being within an expected range for normal operating conditions of said machine, said value being outside said expected range for potentially damaging operating conditions of said machine (col. 10, lines 12-18); and

monitoring said calculated value during operation of said machine an indication of machine operating conditions (col. 10, lines 12-18).

#### STATUTORY DOUBLE PATENTING

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

Art Unit: 2855

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 6 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 6 of prior U.S. Patent No. 5,987,975. This is a double patenting rejection.

Claim 6 of the 5,987,975 patent clearly sets forth a monitor for a machine, said machine including a lubrication system moving lubricating fluid through lubrication pathways of said machine, said monitor comprising:

- a temperature sensor providing a temperature signal representing temperature of said lubricating fluid;

- a pressure sensor providing a pressure signal representing a magnitude of pressure of said lubricating fluid at an input to said lubricating pathways;

- a flow meter providing a flow signal representing a flow rate of said lubricating fluid entering said fluid pathway input; and

- a monitor circuit receiving said temperature signal, said pressure signal and said flow signal and producing during normal operation of said machine a substantially constant output signal, said output signal varying by given magnitude from said substantially constant magnitude during abnormal, potentially-damaging operation of said machine (col. 10).

35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Mogaki (5,107,246).

With regards to claim 1, Mogaki suggests a lubrication system monitor for an engine, said monitor comprising:

a first sensor adapted to monitor a first condition of said engine and provide a first signal representing said first condition (col. 4, lines 49/50);

a second sensor adapted to monitor a second condition of said engine and provide a second signal representing said second condition (col. 4, lines 51/52);

a monitor circuit receiving said first and second signals and producing an output substantially constant for said first and second signals, said substantially constant output corresponding to normal operation of said engine (col. 4, lines 53-58 sets forth that for proper operation of the temperature sensor, and thus the engine, that the output signal is higher than a first failure level and lower than a second failure level, ie. “substantially constant”).



Art Unit: 2855

**RELEVANT ART**


The Applicant's attention is directed to the enclosed "PTO-892" form for the prior art made of record and not relied upon but considered pertinent to the state of the art of the Applicant's disclosure.

**CONCLUSION**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric S. McCall whose telephone number is (571) 272-2183.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Eric S. McCall  
Primary Examiner  
Art Unit 2855  
Nov. 10, 2004